

Strategy for implementing research in hydrology to promote space science among school children in Nigeria

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This paper describes a proposed activity to introduce school children in Nigeria to research in hydrology through the public outreach coordinated by the United Nations affiliated African Regional Centre for Space Science and Technology Education in English (ARCSSTE-E). Over the years, ARCSSTE-E has established a vibrant relationship with Nigerian schools through periodic zonal and national space educational workshops organized for students and teachers. The enthusiasm displayed by the students, coupled with the brilliant performance in the evaluation tests, indicated that this method of informal education is suitable for stimulating the interest of Nigerian pre-collegiate youths in space science and technology, and also to inspire the young learners and develop their interest in the Sciences, Technology, Engineering and Mathematics (STEM). Because only few representatives from each school can participate in these public outreach programs, it became expedient for the Centre to inaugurate space clubs in schools as a forum for students and teachers to meet regularly to discuss space related issues. Since the first space club was officially launched in 2007, the Centre has inaugurated over 300 space clubs in primary, secondary and tertiary institutions, strategically distributed over the six geopolitical zones of Nigeria. The presentation highlights a space club activity designed to introduce the students to precipitation data collection, with locally fabricated rain gauges. The paper also documents the proposed post-data collection activities in which ARCSSTE-E, acting as the coordinating Centre will collaborate with other national and international organizations to standardize and utilize the rainfall data collected by the students for ground validation of satellite data from the Global Precipitation Measurement.

Key words: Public Outreach, Space Club, Human Capacity Development, Hydrologic Research, Global Precipitation Measurement.